

PLASTIC INTEGRATED CIRCUIT PACKAGE AND METHOD  
AND LEADFRAME FOR MAKING THE PACKAGE

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ABSTRACT

5 Packages for an integrated circuit die and methods  
and leadframes for making such packages are disclosed.  
The package includes a die, a die pad, peripheral metal  
contacts, bond wires, and an encapsulant. The die pad  
and contacts are located at a lower surface of the  
10 package. The die pad and the contacts have side  
surfaces which include reentrant portions and  
asperities to engage the encapsulant.

A method of making a package includes providing a  
metal leadframe having a die pad in a rectangular  
15 frame. Tabs extend from the frame toward the die pad.  
The die pad and tabs have side surfaces with reentrant  
portions and asperities. A die is attached to the die  
pad. The die is electrically connected to the tabs.  
An encapsulant is applied to the upper and side  
20 surfaces of the leadframe. Finally, the leadframe is  
cut in situ so that the die pad and tabs are severed  
from the frame, the sides of the package are formed,  
and the package is severed from the leadframe.